UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MIDLAND/ODESSA DIVISION

VIRTAMOVE, CORP.,

              Plaintiff,

       v.

AMAZON.COM, INC.;
AMAZON.COM SERVICES LLC; AND
AMAZON WEB SERVICES, INC.,

              Defendants.

Case No. 7:24-CV-00030-ADA-DTG

PLAINTIFF'S SUR-REPLY
<u>CLAIM CONSTRUCTION BRIEF</u>

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I.   Amazon has not shown invalidity of the '814 Patent claims by clear and convincing evidence

   A.   "disparate computing environments" (claim 1)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Environments run by standalone *or unrelated*[1] computers	Indefinite

Amazon presents two arguments in Reply, each of which fail.

First, VirtaMove does not concede that "unrelated" lacks objective boundaries; rather VirtaMove need not address the boundaries of "unrelated" because ***both parties agree that the full scope of claim 1 does not encompass "unrelated computers."*** *See* Resp. at 5 ("[T]he claim ***undisputedly*** cannot extend to 'unrelated computers.'"); Op. Br. at 4 ("for multiple servers to form a single system, they must somehow be related to each other"). Where, as here, the "source of indefiniteness that [defendant] complains of… plays no discernable role in defining the scope of the claims," there can be no finding of indefiniteness, because "the dispositive question in an indefiniteness inquiry is whether the '***claims***,' not particular claim ***terms***," are indefinite. *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1229, 1231 (Fed. Cir. 2016) (emphases added).

Amazon concedes that VirtaMove's position would make sense "if VirtaMove had omitted 'unrelated' from its proposed construction" (Reply at 2), but VirtaMove has always made clear that the "unrelated" aspect of the construction would not apply in the full scope of claim 1. Resp. at 5. Of course, it is ***Amazon's burden*** to show indefiniteness by clear and convincing evidence,

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[1] Both parties agree that *in the context of the asserted claims*, "disparate computing environments" would not extend to "unrelated computers," so if the Court construes this term, the "or unrelated" language could be excised from VirtaMove's proposed construction.

and Amazon cannot meet that burden by acknowledging that a construction of "environments run by standalone computers" would make sense.

Amazon also contends that "standalone" contradicts other claim limitations. Amazon's purported "evidence" in this regard is a single conclusory sentence from Dr. Long that states that 'a plurality of servers that make up a single system are necessarily… not stand-alone." Reply at 3 (quoting Dkt. 71-6 at ¶37). Dr. Long's testimony does not explain *why* he believes components that are part of a "system" cannot be standalone, and his testimony should accordingly be given no weight. *See ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1327 (Fed. Cir. 2012) (finding expert testimony "conclusory and factually unsupported" where expert "never provided any factual basis for his assertions"). Dr. Long's testimony is also directly contrary to common sense. For example, a "telecommunications system" can include a base station and a "plurality of standalone mobile phones"—the fact that they are part of a broader system does not make them somehow not "standalone" (e.g., independently operable), and Amazon provides no evidence to the contrary.

B.   "container" (claim 1)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
An aggregate of files required to successfully execute a set of software applications on a computing platform. Each container for use on a server is mutually exclusive of the other containers, such that read/write files within a container cannot be shared with other containers.	An aggregate of files required to successfully execute a set of software applications on a computing platform *is referred to as a container*. Each container for use on a server is mutually exclusive of the other containers, such that read/write files within a container cannot be shared with other containers. *A container comprises one or more application programs including one or more processes, and associated system files for use in executing the one or more processes; but containers do not comprise a kernel; each container has its own execution file associated therewith for starting one or more applications.*

Amazon concedes that the Court's construction of this term need not include phraseology that is "redundant to express claim language" or "not material to any disputed issue." Reply at 4. In light of Google's agreement to VirtaMove's compromise proposal in the Google case (*see* Case No. 7:24-cv-00033-DC-DTG, Dkt. 66 at 3), VirtaMove in turn agrees with Amazon's request here to include the sentence "Each container for use on a server is mutually exclusive of the other containers, such that read/write files within a container cannot be shared with other containers."

The only major dispute remaining between VirtaMove and Amazon is whether Claim 1 should include the requirement of an "execution file," which the patentee expressly claimed in dependent claim 2. Including this limitation in claim 1 would render claim 2 entirely redundant, because the only substantive limitation of claim 2 would already appear in claim 1. This plainly violates the doctrine of claim differentiation.

Amazon's only response is to quote a case stating that claim differentiation "cannot overcome a contrary construction dictated by the written description" of a patent. Reply at 6 (quoting *Wi-LAN USA, Inc. v. Apple Inc.*, 830 F.3d 1374, 1391 (Fed. Cir. 2016)). *Wi-LAN* is inapposite. There, the patentee had stated during prosecution that the term "connections" only referred to connections between "an intermediary node and its end user devices," as distinguished from connections between a base station and mobile equipment. *Id.* at 1390-91. Before the patent issued, the patentee replaced the term "connections" with "UL connections" in the independent claim, but left "connections" unchanged in a dependent claim. *Id.* at 1391. In litigation, the patentee argued that "UL connections" and "connections" should be presumed to have different scope, and thus the disclaimer regarding intermediate nodes for "connections" should not apply to "UL connections." *Id.* The Federal Circuit rejected that argument, noting that any differentiation must

be "grounded in reasonable meanings of the term 'UL,'" *i.e.* the only relevant textual difference between the two claims. *Id.* at 1392.

Here, the patentee clearly and unambiguously intended independent claim 1 and dependent claim 2 to have different scopes, with the requirement that "each container has its own execution file associated therewith for starting the one or more applications" appearing only in the dependent claim, and with no reference to an "execution file" at all in the independent claim. Unlike the argument the Federal Circuit rejected in *Wi-LAN*, here VirtaMove's claim differentiation argument is firmly rooted in the specific textual difference between the two claims.

Amazon's other remaining argument seems to focus on the word "processes." Reply at 5. But as VirtaMove explained (and Amazon does not dispute), "programs include a 'process'— otherwise the program would be unable to *do* (or 'process') anything." Resp. at 8 (emphasis in original). Amazon's argument in this regard is limited to the unremarkable assertion that the specification "expressly distinguishes between 'programs' and their 'processes'" (Reply at 5), which concedes that programs *do* include processes. Amazon's attempt to inject redundant language into its construction should be rejected accordingly. Amazon's proposed construction is also at odds with the agreement VirtaMove reached with Google in the co-pending case. *See* Case No. 7:24-cv-00033-DC-DTG, Dkt. 66 at 3.

II. Amazon has not shown invalidity of the '058 Patent claims by clear and convincing evidence

A. "critical system elements" (claim 1)

Amazon's reliance on conclusory expert testimony cannot support its burden to establish indefiniteness by clear and convincing evidence. The '058 patent specification contains extensive discussion and description of critical system elements; the term, along with its abbreviation "CSE,"

appears over a hundred times in the patent, including in the description and illustrations of prior art systems.

Amazon takes a divide-and-conquer approach to indefiniteness, separately criticizing the "normally" and "critical" concepts described in the patent specification. Reply at 6-8. Both attacks fail. As to "normally," VirtaMove explained in its responsive brief that the specification and claim context confirm that this is a reference, not to prior art operating systems in general, but to the "normal" operation of the actual operating system as claimed, *e.g.* the operating system within an embodiment of the claimed invention. *See* Resp. at 10-11. For example, limitation 1(b) of claim 1 requires "an operating system having an operating system kernel having OS critical system elements (OSCSEs)," corresponding to the CSEs "normally" found in the operating system. This is in distinction to the inventive concept of a CSE "replicated from kernel mode, into user mode" within a shared library, as claimed in limitation 1(c). *Id*.

Amazon gives no response to VirtaMove's explanation, instead merely reiterating the conclusory opinion of its expert Dr. Long that "normally" refers to whether a CSE was "common among operating system generally." Reply at 6-7. Dr. Long's results-oriented opinion lacks any support from the intrinsic record; for example, there is no suggestion in the specification that a POSITA would have looked to survey the history of OSes to determine whether a particular element is "normally provided," as opposed to the far more straightforward approach of simply looking to what is included in the operating system at issue. The reason that the specification describes CSEs as "traditionally" being provided by an operating system is that traditional systems do not *also* provide a replica of the CSE in user mode within a shared library, as recited in limitation 1(c).

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As to "critical," Amazon seems to believe that this word requires an inquiry into *how badly* an application would fail if it were deprived of a CSE that it relies upon. Reply at 7-8. Amazon is perhaps imagining a category of "somewhat critical" system elements that can be removed without *completely* breaking software. For example, Amazon suggests that the functionality to "[a]ccess files that reside in different locations as though they were all in a single locality," which the patent specification gives as an exemplary CSE, could be removed without impairing software that relies on it, and thus is not critical. Reply at 8.

Not so. The phrase at issue is "critical *to the operation of a software application*." '058 Patent at 6:6-8. If the operation of an application relies on a particular functionality—even if the functionality can be characterized as an "extension or optimization"—then the functionality is critical to that particular manner of operation of the application. Amazon suggests that if an application could work around the loss of such functionality, *e.g.* merely lose operational capabilities rather than crash outright, the element cannot really be "critical." But there is nothing in the intrinsic record suggesting that the resilience of an application is relevant. Amazon does not provide any intrinsic or extrinsic evidence, for example, that a POSITA would find it acceptable for a computing system to *only partially* break application software.

B.   "functional replicas" (claim 1)

Amazon argues that, because there is supposedly lexicography or disclaimer that the word "replica" encompasses anything merely "similar," then the claim term "functional replica" is not limited to *functional* replicas but can encompass anything merely similar. Reply at 8-9. Amazon's argument ignores the actual claim language and context (which makes clear that similarity is to be evaluated in the context of **functionality**) and thus fails.

Amazon's assertion that "the word 'functional' provides no objective boundaries for the similarities that the 'replica' definition requires" (Reply at 9) is conclusory and incorrect. As VirtaMove explained in its response (and Amazon does not dispute), juries are routinely called on to evaluate whether a product performs "substantially the same function" a claim element—i.e., whether the product includes the substantial functional equivalence of a claim element. Resp. at 13-14. Any quips aside, Amazon cannot realistically contend that this term is indefinite to a POSITA when it invokes the exact same type of evaluation juries routinely perform.

Amazon also contends that "'functional replicas' must include 'replacements'" (Reply at 9), but again, Amazon does not dispute that "'substantial functional equivalents' is logically the broadest'" description of "functional replicas" in the specification because "a replacement… would necessarily also be functionally equivalent." Resp. at 12. Accordingly, in order to discern the bounds of claim scope, a POSITA need only determine whether two elements are functional equivalents, which cannot be indefinite as it is routinely asked of juries.

C.   "shared library" (claim 1)

The parties agree that "shared library" should be construed as "An application library whose code space is shared among all user mode applications." *See* Resp. at 14; Reply at 10.

D.   "forms a part of … software applications" (claim 1)

Amazon's Reply confirms that it is seeking to broaden the scope of this claim term, replacing "forms a part" with a different requirement that captures merely a ***portion of*** the claim requirement. Reply at 10. By Amazon's logic, if a patent claimed a "diesel car," and the patentee distinguished an electric car during prosecution on the basis that the electric car did not include any combustion engine, then "diesel car" would be properly construed as "car with combustion engine" and thus encompass cars with ***gasoline*** combustion engines. Of course, that would be too

broad; a "diesel car" requires a ***diesel*** combustion engine. Here, "resid[ing] in the same address space" is merely *one requirement* for "forms a part of…," not its *definition*, and Amazon does not even make any allegation to the contrary. Amazon gives no authority for its extraordinary request to use prosecution history disclaimer—which by definition *narrows* claim scope—in order to *broaden* claim scope.

Dated: December 13, 2024   Respectfully submitted,

                                            /s/ Reza Mirzaie
                                            Reza Mirzaie
                                            CA State Bar No. 246953
                                            Marc A. Fenster
                                            CA State Bar No. 181067
                                            Neil A. Rubin
                                            CA State Bar No. 250761
                                            Amy E. Hayden
                                            CA State Bar No. 287026
                                            Jacob R. Buczko
                                            CA State Bar No. 269408
                                            James S. Tsuei
                                            CA State Bar No. 285530
                                            James A. Milkey
                                            CA State Bar No. 281283
                                            Christian W. Conkle
                                            CA State Bar No. 306374
                                            Jonathan Ma
                                            CA State Bar No. 312773
                                            Daniel Kolko
                                            CA State Bar No. 341680
                                            RUSS AUGUST & KABAT
                                            12424 Wilshire Boulevard, 12th Floor
                                            Los Angeles, CA 90025
                                            Telephone: 310-826-7474
                                            Email: rmirzaie@raklaw.com
                                            Email: mfenster@raklaw.com
                                            Email: nrubin@raklaw.com
                                            Email: ahayden@raklaw.com
                                            Email: jbuczko@raklaw.com
                                            Email: jtsuei@raklaw.com
                                            Email: jmilkey@raklaw.com

Email: cconkle@raklaw.com
Email: jma@raklaw.com
Email: dkolko@raklaw.com

Qi (Peter) Tong
4925 Greenville Ave., Suite 200
Dallas, TX 75206
Email: ptong@raklaw.com

**ATTORNEYS FOR PLAINTIFF
VIRTAMOVE, CORP.**

CERTIFICATE OF SERVICE

I certify that this document is being served upon counsel of record for Defendants on December 13, 2024 via CM/ECF.

/s/ *Christian W. Conkle*